The listing of the claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Please cancel claims 1-62.

Please add new claims 63-113 as follows:

1. – 62. (cancelled)

63. (new) A vehicular rearview mirror system, comprising:

at least one variable reflectivity mirror assembly, said at least one variable reflectivity mirror assembly comprising a reflective element having a reflectance level that is variable in response to a signal applied to said reflective element;

a drive circuit applying a drive signal to said reflective element, said drive circuit including a digital controller and a switching power supply controlled by said digital controller, wherein said switching power supply comprises a step-down converter.

64. (new) The vehicular rearview mirror system in claim 63 wherein said step-down converter is operated in a saturated condition.

65. (new) The vehicular rearview mirror system in claim 63 wherein said step-down converter comprises a buck converter.

66. (new) The vehicular rearview mirror system in claim 63 wherein said step-down converter comprises an impedance device and at least one electronic switch in series electrical connection between said mirror assembly and a voltage potential.

67. (new) The vehicular rearview mirror system in claim 66 wherein said impedance device has energy storing capability.

68. (new) The vehicular rearview mirror system in claim 66 wherein said impedance device comprises an inductor.

69. (new) The vehicular rearview mirror system in claim 66 wherein said voltage potential is in the range from 5 volts DC to 16 volts DC.

70. (new) The vehicular rearview mirror system in claim 69 wherein said voltage potential is approximately 8 volts DC.

71. (new) The vehicular rearview mirror system in claim 66 wherein said at least one electronic switch is operated in a saturated condition.

72. (new) The vehicular rearview mirror system in claim 66 wherein said at least one electronic switch is operated during steady-state reflectance levels at a duty cycle less than or equal to 65%.

73. (new) The vehicular rearview mirror system in claim 72 wherein said at least one electronic switch is operated during steady-state reflectance levels at a duty cycle that operates in a range of 0% to 50%.

74. (new) The vehicular rearview mirror system in claim 66 wherein said at least one electronic switch is one of a bipolar transistor and a field effect transistor.

75. (new) The vehicular rearview mirror system in claim 66 wherein said at least one electronic switch comprises a bipolar transistor.

76. (new) The vehicular rearview mirror system in claim 66 wherein said drive circuit monitors voltage across said reflective element and controls said at least one electronic switch at least in part as a function of the monitored voltage.

77. (new) The vehicular rearview mirror system in claim 76 wherein said drive circuit periodically monitors voltage across said reflective element at a same general time relative to operation of said switch.

78. (new) The vehicular rearview mirror system in claim 77 wherein said drive circuit periodically monitors voltage across said reflective element when said at least one electronic switch is open.

79. (new) The vehicular rearview mirror system in claim 66 including another impedance device in series electrical connection with said at least one electronic switch and said impedance device to limit voltage across said reflective element should said at least one electronic switch remain in a closed state.

80. (new) The vehicular rearview mirror system in claim 66 including another electronic switch between said impedance device and another voltage potential to conduct current in said impedance device when said at least one electronic switch is not conducting.

81. (new) The vehicular rearview mirror system in claim 80 wherein said another switch comprises one of a diode, a bipolar transistor and a field effect transistor.

82. (new) The vehicular rearview mirror system in claim 80 wherein said another switch comprises a diode.

83. (new) The vehicular rearview mirror system in claim 80 wherein said another switch comprises a bipolar transistor.

84. (new) The vehicular rearview mirror system in claim 63 wherein said digital controller comprises a microcomputer.

85. (new) The vehicle rearview mirror system in claim 63 wherein said reflective element comprises an electrochromic reflective element.

86. (new) The vehicle rearview mirror system in claim 63 wherein said drive circuit applying a drive signal to said reflective element of at least approximately 50 milliamperes.

87. (new) The vehicle rearview mirror system in claim 63 wherein said drive circuit applies a drive signal to said reflective element having a maximum voltage of approximately 2 volts.

88. (new) The vehicle rearview mirror system in claim 87 wherein said drive circuit applies a drive signal to said reflective element having a voltage in a range of from approximately 1 volt to approximately 2 volts.

89. (new) A vehicular rearview mirror system, comprising:

at least one electrochromic rearview mirror assembly having an electrochromic reflective element, said electrochromic reflective element having a reflectance level that is variable in response to a signal applied to said electrochromic reflective element;

a drive circuit applying a drive signal to said electrochromic reflective element, said drive circuit including a digital controller and a switching power supply controlled by said digital controller, wherein said switching power supply comprises a step-down converter; and

said drive circuit avoids placing said electrochromic reflective element in an over-voltage condition during normal operating conditions of said drive circuit.

90. (new) The vehicular rearview mirror system in claim 89 wherein said step-down converter is operated in a saturated condition.

91. (new) The vehicular rearview mirror system in claim 89 wherein said step-down converter comprises a buck converter.

92. (new) The vehicular rearview mirror system in claim 89 wherein said step-down converter comprises an impedance device and at least one electronic switch in series electrical connection between said electrochromic reflective element and a voltage potential.

93. (new) The vehicular rearview mirror system in claim 92 wherein said impedance device has energy storing capability.

94. (new) The vehicular rearview mirror system in claim 92 wherein said impedance device comprises an inductor.

95. (new) The vehicular rearview mirror system in claim 92 wherein said voltage potential is in the range from 5 volts DC to 16 volts DC.

96. (new) The vehicular rearview mirror system in claim 95 wherein said voltage potential is approximately 8 volts DC.

97. (new) The vehicular rearview mirror system in claim 92 wherein said at least one electronic switch is operated in a saturated condition.

98. (new) The vehicular rearview mirror system in claim 92 wherein said at least one electronic switch is operated during steady-state reflectance levels at a duty cycle less than or equal to 65%.

99. (new) The vehicular rearview mirror system in claim 98 wherein said at least one electronic switch is operated during steady-state reflectance levels at a duty cycle that operates in a range of 0% to 50%.

100. (new) The vehicular rearview mirror system in claim 92 wherein said at least one electronic switch is one of a bipolar transistor and a field effect transistor.

101. (new) The vehicular rearview mirror system in claim 92 wherein said at least one electronic switch comprises a bipolar transistor.

102. (new) The vehicular rearview mirror system in claim 92 wherein said drive circuit monitors voltage across said electrochromic reflective element and controls said at least one electronic switch at least in part as a function of the monitored voltage.

103. (new) The vehicular rearview mirror system in claim 102 wherein said drive circuit periodically monitors voltage across said electrochromic reflective element at a same general time relative to operation of said switch.

104. (new) The vehicular rearview mirror system in claim 103 wherein said drive circuit periodically monitors voltage across said electrochromic reflective element when said at least one electronic switch is open.

105. (new) The vehicular rearview mirror system in claim 92 including another impedance device in series electrical connection with said at least one electronic switch and said impedance device to limit voltage across said electrochromic cell should said at least one electronic switch remain in a closed state.

106. (new) The vehicular rearview mirror system in claim 92 including another electronic switch between said impedance device and another voltage potential to conduct current in said impedance device when said at least one electronic switch is not conducting.

107. (new) The vehicular rearview mirror system in claim 106 wherein said another switch comprises one of a diode, a bipolar transistor and a field effect transistor.

108. (new) The vehicular rearview mirror system in claim 106 wherein said another switch comprises a diode.

109. (new) The vehicular rearview mirror system in claim 106 wherein said another switch comprises a bipolar transistor.

110. (new) The vehicular rearview mirror system in claim 89 wherein said digital controller comprises a microcomputer.

111. (new) The vehicular rearview mirror system in claim 89 wherein said drive circuit applying a drive signal to said electrochromic reflective element of at least approximately 50 milliamperes.

112. (new) The vehicular rearview mirror system in claim 89 wherein said drive circuit applies a drive signal to said electrochromic reflective element having a maximum voltage of approximately 2 volts.

113. (new) The vehicular rearview mirror system in claim 112 wherein said drive circuit applies a drive signal to said electrochromic reflective element having a voltage in a range of from approximately 1 volt to approximately 2 volts.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. - 49. (cancelled)

50. (New) A vehicular digital electrochromic mirror system, comprising:

an interior mirror assembly and at least one exterior mirror assembly, said interior mirror assembly comprising an interior electrochromic reflective element and a control, said at least one exterior mirror assembly comprising an exterior electrochromic reflective element;

said control comprising a microcomputer establishing an interior reflectance value for said interior reflective element and an exterior reflectance value for said exterior reflective element, said interior reflective element achieving a partial reflectance level in response to the interior reflectance value, said exterior reflectance element achieving a partial reflectance level in response to the exterior reflectance value wherein at least one of said interior and exterior reflectance values is established by a pulse-width modulated signal;

a vehicle bus communicating the exterior reflectance value to said exterior reflective element; and

said interior mirror assembly comprising at least one additional accessory that is controlled by said control.

51. (New) The mirror system in claim 50 wherein said at least one additional accessory is selected from the group consisting of a headlamp controller, a map-reading light, an external temperature display, a compass display, a keyless entry system, a video camera internal surveillance system, a video telephone function, a seat occupancy detector, a fuel level display, a vehicle status display, a trip computer function, an intrusion detector, a contacting rain sensor, a non-contacting rain sensor, and a microphone.

52. (New) The mirror system in claim 50 wherein said at least one additional accessory comprises a compass display and a magneto-responsive sensing system comprising one of a magneto-resistive sensor, a magneto-inductive sensor, a magneto-capacitive sensor and a flux-gate sensor.

53. (New) The mirror system in claim 50 wherein said vehicle bus comprises a car area network.

54. (New) The mirror system in claim 50 wherein said at least one exterior mirror assembly comprises a node on said car area network.

55. (New) The mirror system in claim 50 including a plurality of light sensors at said interior mirror assembly, wherein said control determines said interior reflectance value and said exterior reflectance value in response to light sensed by said light sensors.

56. (New) The mirror system in claim 50 wherein both said interior and exterior reflectance values are established by pulse-width modulated signals.

57. (New) The mirror system in claim 50 wherein said control comprises an electronic switch controlled by said microcomputer generating said pulse-width modulated signal.

58. (New) The mirror system in claim 57 wherein said electronic switch comprises a transistor.

59. (New) The mirror system in claim 50 wherein said at least one exterior mirror assemblies comprises at least two exterior mirror assemblies and wherein said control establishes said exterior reflectance value for one of said exterior mirror assemblies and another exterior reflectance value for another of said exterior mirror assemblies.

60. (New) The mirror system in claim 50 wherein said at least one additional accessory comprises a compass display and a magneto-resistive sensor.

61. (New) The mirror system in claim 50 wherein said at least one additional accessory comprises a compass display and a magneto-inductive sensor.

62. (New) The mirror system in claim 50 wherein said at least one additional accessory comprises a compass display and a magneto-capacitive sensor.

63. (New) The mirror system in claim 50 wherein said at least one additional accessory

comprises a compass display and a flux-gate sensor.

64. (New) The mirror system in claim 50 wherein said at least one additional accessory is connected with said vehicle bus.

65. (New) A vehicular digital electrochromic mirror system, comprising:

an interior mirror assembly and at least one exterior mirror assembly, said interior mirror assembly comprising an interior electrochromic reflective element and a control, said at least one exterior mirror assembly comprising an exterior electrochromic reflective element;

said control comprising a microcomputer establishing an interior reflectance value established by a first pulse-width modulated signal for said interior reflective element and an exterior reflectance value established by a second pulse-width modulated signal for said exterior reflective element, said interior reflective element achieving a partial reflectance level in response to the interior reflectance value, said exterior reflectance element achieving a partial reflectance level in response to the exterior reflectance value;

a vehicle bus communicating the exterior reflectance value to said exterior reflective element; and

said interior mirror assembly comprising at least one additional accessory wherein said at least one additional accessory is selected from the group consisting of a headlamp controller, a map-reading light, an external temperature display, a compass display, a keyless entry system, a video camera internal surveillance system, a video telephone function, a seat occupancy detector, a fuel level display, a vehicle status display, a trip computer function, an intrusion detector, a contacting rain sensor, a non-contacting rain sensor, and a microphone.

66. (New) The mirror system in claim 65 wherein said at least one additional accessory comprises a compass display and a magneto-responsive sensing system comprising one of a magneto-resistive sensor, a magneto-inductive sensor, a magneto-capacitive sensor and a flux-gate sensor.

67. (New) The mirror system in claim 65 wherein said vehicle bus comprises a car area network.

68. (New) The mirror system in claim 65 wherein said at least one exterior mirror assembly

comprises a node on said car area network.

69. (New) The mirror system in claim 65 including a plurality of light sensors at said interior mirror assembly, wherein said control determines said interior reflectance value and said exterior reflectance value in response to light sensed by said light sensors.

70. (New) The mirror system in claim 65 wherein said control comprises at least one electronic switch controlled by said microcomputer generating at least one of said first and second pulse-width modulated signals.

71. (New) The mirror system in claim 70 wherein said at least one electronic switch comprises a transistor.

72. (New) The mirror system in claim 65 wherein said at least one exterior mirror assembly comprises at least two exterior mirror assemblies and wherein said control establishes said exterior reflectance value for one of said exterior mirror assemblies and another exterior reflectance value for another of said exterior mirror assemblies.

73. (New) The mirror system in claim 65 wherein said at least one accessory is controlled by said control.

74. (New) The mirror system in claim 65 wherein said at least one accessory is connected with said vehicle bus.

75. (New) The mirror system in claim 65 wherein said at least one additional accessory comprises a compass display and a magneto-resistive sensor.

76. (New) The mirror system in claim 65 wherein said at least one additional accessory comprises a compass display and a magneto-inductive sensor.

77. (New) The mirror system in claim 65 wherein said at least one additional accessory comprises a compass display and a magneto-capacitive sensor.

78. (New) The mirror system in claim 65 wherein said at least one additional accessory comprises a compass display and a flux-gate sensor.

79. (New) A vehicular digital electrochromic mirror system, comprising:

an interior mirror assembly and at least one exterior mirror assembly, said interior mirror assembly comprising an interior electrochromic reflective element and a control,

said at least one exterior mirror assembly comprising an exterior electrochromic reflective element;

said control comprising a microcomputer establishing an interior reflectance value for said interior reflective element and an exterior reflectance value for said exterior reflective element, said interior reflective element achieving a partial reflectance level in response to the interior reflectance value, said exterior reflectance element achieving a partial reflectance level in response to the exterior reflectance value wherein at least one of said interior and exterior reflectance values is established by a pulse-width modulated signal;

a vehicle bus communicating the exterior reflectance value to said exterior reflective element; and

said interior mirror assembly comprising at least one additional accessory, wherein said at least one additional accessory is selected from the group consisting of a headlamp controller, a map-reading light, an external temperature display, a compass display, a keyless entry system, a video camera internal surveillance system, a video telephone function, a seat occupancy detector, a fuel level display, a vehicle status display, a trip computer function, an intrusion detector, a contacting rain sensor, a non-contacting rain sensor, and a microphone.

80. (New) The mirror system in claim 79 wherein said at least one additional accessory comprises a compass display and a magneto-responsive sensing system comprising one of a magneto-resistive sensor, a magneto-inductive sensor, a magneto-capacitive sensor and a flux-gate sensor.

81. (New) The mirror system in claim 79 wherein said vehicle bus comprises a car area network.

82. (New) The mirror system in claim 79 wherein said at least one exterior mirror assembly comprises a node on said car area network.

83. (New) The mirror system in claim 79 including a plurality of light sensors at said interior mirror assembly, wherein said control determines said interior reflectance value and said exterior reflectance value in response to light sensed by said light sensors.

84. (New) The mirror system in claim 79 wherein said control comprises an electronic switch controlled by said microcomputer generating said pulse-width modulated signal.

85. (New) The mirror system in claim 84 wherein said electronic switch comprises a transistor.

86. (New) The mirror system in claim 79 wherein said at least one exterior mirror assemblies comprises at least two exterior mirror assemblies and wherein said control establishes said exterior reflectance value for one of said exterior mirror assemblies and another reflectance value for another of said exterior mirror assemblies.

87. (New) The mirror system in claim 79 wherein said at least one accessory comprises a keyless entry system.

88. (New) The mirror system in claim 87 wherein said control comprises an electronic switch controlled by said microcomputer.

89. (New) The mirror system in claim 88 wherein said electronic switch comprises a transistor.

90. (New) The mirror system in claim 79 wherein said at least one accessory comprises a compass display.

91. (New) The mirror system in claim 90 wherein said control comprises an electronic switch controlled by said microcomputer.

92. (New) The mirror system in claim 91 wherein said electronic switch comprises a transistor.

93. (New) The mirror system in claim 79 wherein said at least one accessory is controlled by said control.

94. (New) The mirror system in claim 79 wherein said at least one accessory is connected with said vehicle bus.

95. (New) The mirror system in claim 79 wherein said at least one additional accessory comprises a compass display and a magneto-resistive sensor.

96. (New) The mirror system in claim 79 wherein said at least one additional accessory comprises a compass display and a magneto-inductive sensor.

97. (New) The mirror system in claim 79 wherein said at least one additional accessory comprises a compass display and a magneto-capacitive sensor.

98. (New) The mirror system in claim 79 wherein said at least one additional accessory comprises a compass display and a flux-gate sensor.